## Amendments to the Claims:

This listing of the claims will replace all prior versions, and listings, of claims in the application:

## Listing of the Claims:

A process comprising: Claim 1 (currently amended):

circulating a working fluid through a first a flow path, wherein the working fluid comprises molecules having a carbon-to-carbon bond;

pumping the organic based liquid working fluid in liquid form to an elevated pressurc;

flowing the organic-based liquid working fluid through a heat exchanger comprising bipolar plates in a fuel cell stack;

heating the organic-based liquid working fluid to a high temperature and highpressure gas;

expanding the high temperature and high-pressure gas through an expander to produce shaft work;

using the shaft work to drive an air compressor for compressing air and delivering compressed air to a fuel cell subcomponent;

and removing energy from the gas to change the gas to the organic-based liquid working fluid in liquid form;

Apr 15 05 09:58a

586-566-4478

and flowing hydrogen through a second flow path including the fuel cell stack to generate electricity using the hydrogen, and wherein the first flow path does not include a steam reforming reactor to reform the working fluid.

A process as set forth in claim 1 further Claim 2 (previously presented): comprising using the shaft work to drive a pump for pressurizing and delivering cooling fluid to a fuel cell system component.

Claims 3-6 (canceled).

A process of heating a fuel cell stack during Claim 7 (currently amended): relatively cold startup conditions comprising:

- pumping a fuel cell stack organic based liquid cooling fluid to an elevated a) pressure, and wherein the liquid cooling fluid comprises molecules having a carbon-to-carbon bond;
- flow in the organic based liquid cooling fluid through a heat exchanger in b) a fuel cell stack thereby transferring thermal energy between the fuel cell stack organic based liquid cooling fluid and a fuel-cells fuel cell stack;
  - heating the organic based liquid cooling fluid; c)
- immediately thereafter expanding the heated cooling fluid in an expander d) to produce shaft work;
- using the shaft work to drive an air compressor for compressing air and c) delivering compressed air to the fuel a fuel cell stack;

- f) directing the cooling fluid through a condenser comprising fans and wherein the condenser fans are turned off, and
- g) repeating steps (a-f) until the temperature of the fuel cell stack has reached a predetermined temperature suitable for operating the fuel cell under post-startup operating conditions.

Claim 8 (original): A process as set forth in claim 7 further comprising using the shaft work to drive a pump for pressurizing and delivering cooling fluid to a fuel cell system component.

Claim 9 (canceled).

Claim 10 (currently amended): A process as set forth in claim 1 wherein the organic based liquid cooling working fluid comprises CClF<sub>2</sub>CClF<sub>2</sub>.

Claim 11 (currently amended): A process as set forth in claim 7 wherein the organic-based liquid cooling fluid comprises CCIF<sub>2</sub>CCIF<sub>2</sub>.